

ABSTRACT

The present invention provides a plated steel material, said plated steel material having a plated layer which contains Al of 4% or more in mass, excellent in surface smoothness even when a cooling rate is low. In the present invention: a plated layer which contains Al of 4% or more in mass and has an Al-type intermetallic compound in an Al phase or abutting on an Al phase is formed on the surface of a steel material; in particular, high corrosion-resistance is secured in various environments by using a plated layer containing Al of 4 to 20% and Mg of 1 to 10% in mass with the balance consisting of Zn and unavoidable impurities or a plated layer containing Al of 4 to 20%, Mg of 1 to 10% and Si of 0.001 to 2% in mass with the balance consisting of Zn and unavoidable impurities; said plated layer contains an intermetallic compound having a melting point of 600°C or higher by 0.001 to 0.5% in mass; and a plated steel material having an excellent surface smoothness is obtained by using an Al-type intermetallic compound wherein at least one of the lattice constants is in the range from 3 to 5 Å.